

wherein the light pass length variation ΔL , the incident angle α at the junction, and the marginal distance R.

IN THE CLAIMS

--1. (Twice Amended) An optical scanning apparatus, comprising:
two optical scanning systems, each including at least [two] one light [sources each] source configured [and arranged] to emit a light beam[;
], and at least [two] one beam shaping [mechanisms each] mechanism configured [and arranged] to shape each light beam; and
a light deflector configured [and arranged] to deflect each light beam in a continuously changing direction thereby converting each light beam into a scanning light beam[; and],
each of said two optical scanning systems further including at least [two] one scanning beam focusing [mechanisms each] mechanism configured to bring the scanning light beam to a focus on a photoconductive surface, each [of said at least two] scanning beam focusing [mechanisms] mechanism satisfying an equation:
$$[\Delta L \cos \alpha > R/2] \quad \Delta L \cos \alpha < R/2$$
 at a junction of the [at least two] scanning light beams with each other on the photoconductive surface,
wherein ΔL represents an inherent light pass length variation between central light passage lengths of the first and second optical systems, α represents an incident angle, and R represents an inherent marginal distance.

4. (Twice Amended) The optical scanning apparatus, comprising:
two optical scanning systems, each including at least [two] one light source means for emitting a light beam[;

] , and at least [two] one beam shaping means [each] for shaping the light beam; and light deflecting means for deflecting each light beam in a continuously changing direction thereby converting each light beam into a scanning light beam[; and] ,
each of said two optical scanning systems further including at least [two] one scanning beam focusing means [each] for bringing the scanning light beam to a focus on a photoconductive surface, each [of said at least two] scanning beam focusing means satisfying an equation:

$[\Delta L \cos \alpha > R/2]$ $\Delta L \cos \alpha < R/2$ at a junction of the [at least two] scanning light beams with each other on the photoconductive surface,

wherein ΔL represents an inherent light pass length variation between central light passage lengths of the first and second optical systems, α represents an incident angle, and R represents an inherent marginal distance.

7. (Twice Amended) A method of optical scanning including two optical scanning systems, comprising the steps of:

emitting at least two light beams;

shaping said at least two light beams;

deflecting each of said at least two light beams in a continuously changing direction so as to convert each of said at least two light beams into a scanning light beam; and

bringing the scanning light beam to a focus on a photoconductive surface using at least two scanning beam focusing mechanisms each of which satisfies an equation:

$[\Delta L \cos \alpha > R/2]$ $\Delta L \cos \alpha < R/2$ at a junction of the scanning light beam with the other scanning light beam on the photoconductive surface,

wherein ΔL represents an inherent light pass length variation between central light passage lengths of the first and second optical systems, α represents an incident angle, and R represents an inherent marginal distance.--